Roll No.									

IET, Dr. Shakuntala Misra National Rehabilitation University, Lucknow,
Department of Applied Science and Humanities
Sessional Test – 2 (2023-24)

Sem & Year: 1st / 1st **Session: 2023-24**

Subject: Energy Science & Engg. **Code: TMC-102**

Duration: 90 Minutes **Max. Marks: 20**

Part A

Attempt all questions **(1×5=5 Marks)**

1. Which form of energy is associated with the motion of an object?

a) Thermal energy b) Mechanical energy
c) Chemical energy d) Nuclear energy

2. Atom bomb is based on the phenomena of

a) Nuclear fission b) Nuclear fusion
c) Radioactivity d) None of these

3. Why is a transparent cover used in a flat plate collector?

a) To entirely reflect the incident sunlight back b) To minimize transmission of the incident sunlight into the box
c) To maximize transmission of the incident sunlight into the box d) To ensure partially transmission of the incident sunlight into the box

4. Wind mill called as 'Darrieus' mill is

a) Flexible boom mill b) Vertical axis mill
c) Horizontal axis mill d) None of these

5. Bio ethanol is mixed with _____ to generate transportation fuel.

a) Oil b) Diesel
c) Kerosene d) Petrol

Part B

Attempt any five Questions **(2×5=10 Marks)**

1. What is Biomass energy?
2. Classify the different forms of Energy.
3. Differentiate between Conventional and Non-conventional source of energy with examples.

4. What are the different components of the Hydroelectric energy?
5. Explain the working of Nuclear energy.
6. What is Fossil fuel? Discuss the advantages and disadvantages of using it.

Part C

Attempt any one Question **(1×5=5 Marks)**

1. Describe in brief the working of a Solar cell.
2. Explain the different types of Geothermal source of energy production.